RULE

Department of Public Safety and Corrections Office of the State Fire Marshal

Amusement Ride Safety (LAC 55:V. Chapter 25)

In accordance with the provisions of R.S. 49:950 et seq. and R.S. 40:1484.3, relative to the authority of the State Fire Marshal to promulgate and enforce rules, relative to the regulation of Amusement Attractions and Rides, the Office of the State Fire Marshal hereby adopts the following rules.

Title 55 PUBLIC SAFETY Part V. Fire Protection

Chapter 25. Amusement Attractions and Rides §2501. Definition of Terms

Amusement Inspection - the official inspection by the Mechanical Safety Manager, or his designee, of a ride or device.

A.N.S.I. - the American National Standards Institute.

Approved - acceptable to the assistant secretary. Any product certified or classified, or labeled, or listed by a nationally recognized testing agency may be deemed to be acceptable, unless specifically banned by order of the assistant secretary.

A.S.T.M. - the American Society of Testing Materials.

Barrier - a physical obstruction designed and constructed to safely bring a kart to a full stop or guide the kart safely back on the track.

Child - a person 12 years of age and under.

Cone - a tapered cylinder used for marking the apex of the curves.

Containing Device - a strap, belt, bar, gate or other safety device designed to prevent accidental or inadvertent dislodgement of a passenger from a ride which does not actually provide physical support.

Course/Route/Defined Area - the designed path the kart will follow.

Existing Kart Tracks Kart - tracks in business prior to January 1, 1997.

Governor - a speed limiting device.

Guardian - a person 18 years of age and over.

Guardian Restriction - a condition placed on an amusement ride or attraction where a passenger must be accompanied on the ride by a guardian.

Guards - a device to protect the public from coming in contact with any rotating chains, belts, hot engines or muffler parts.

Helmet - a covering approved by the Department of Transportation (D.O.T.) to protect the head from impact and injury.

Kart - any mechanically powered vehicle, other than those regulated by the Consumer Products

Safety Commission.

Kart Ride - shall include but not be limited to karts, kart track, refueling areas, spectator areas and other areas used in any manner of the kart operation.

MPH - the number of miles the kart may travel in one (1) hour.

New Construction - any new kart tracks which are constructed after January 1, 1997.

Pinching Hazard - any configuration of components that would pinch or entrap the fingers or toes of a child or adult.

Pit Area - the designated area where patrons are loaded and unloaded from karts.

Primary Structural Members - any part of the flume or pool structure that carries or retains any static loads or stress caused by water pressure or structure weight.

Puncture Hazard - any surface or protrusion that would puncture a child's or an adult's skin under casual contact.

Refueling Area - a location remote from any area accessible to the public where the karts are refueled.

Restraining Device - a safety belt, harness, or other device which offers actual physical support, or restraint to the patrons of a kart.

Ride Action - a term which shall be used to describe the movements and/or motions of an amusement ride or attraction which are generated amusement purposes; and/or the bodily actions or reactions experienced by the passengers which are a result of the movement or motions. Bodily actions or reactions which are a result of the commission of an act or acts of malicious negligence and/or horseplay shall not be construed as resulting from the ride action.

Ride Operator - any person or persons actually engaged in or directly controlling an amusement ride or attraction.

Rope, Wire Rope and Cable - are interchangeable, but not interchangeable with the terms for fiber rope and manila rope.

Roll Bar - a metal frame designed to extend above the patron's head, support the weigh of the kart and patron, and protect the patron should the kart overturn.

Safety Retainer - a secondary safety wire, rope, bar attachment or other device designed to prevent parts of an amusement ride or amusement attraction from becoming disengaged from the mechanism or from tipping or tilting in a manner to cause hazard to persons riding on, or in the vicinity of, an amusement ride or amusement attraction.

Safety Walls - that part of the water flume designed to keep a slider within the geometric confines of the flume.

Serious Injury - death or injury to a member of the public which requires immediate in-patient overnight hospitalization incurred during the operation of any amusement ride.

Splash Pool - a landing pool at the end of the flume from which bathers exit to the deck.

Splash Pool Decks - those areas surrounding a pool or flume which are specifically constructed or installed for use by sliders.

Stress - force per unit of area.

Track - the physical surface on which the kart operates.

Tread Contact Surface - foot contact surfaces of ladder, step, stair, or ramp.

Water Amusement Ride - an amusement ride or attraction which utilizes water as the primary entertainment medium, and moreover, the customer is either fully or partially immersed in water.

Water Flume - a sloped through -like or tubular structure of varying slope and direction usually made of fiberglass or coated concrete which utilizes water as a lubricant and/or the method of

regulating rider speed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of State Fire Marshal, LR 25:85 (January 1999).

§2503. Administration

- **A.** The Office of the State Fire Marshal which administers the provisions of R.S. 40:1484.1 et seq. relating to the Amusement Ride Safety Law, is located at 5150 Florida Blvd., Baton Rouge, LA 70806.
- **B.** The following Nationally recognized standards are adopted and used in the formulation and enforcing of these rules and regulations; should there arise a conflict between these standards and R.S. 40:1484.1 et seq. or the rules and regulations, the provisions of R.S. 40:1484.1 et seq. and/or the rules shall apply:
- **1**. ASTM F698-94 Standard Specification for Physical Information to be Provided for Amusement Rides and Devices (approved July 15, 1994; published September 1994);
- **2**. ASTM F747-95 Standard Terminology Relating to Amusement Rides and Devices (approved April 15, 1995; published June 1995);
- **3.** ASTM F770-93 Standard Practice for Operation Procedures for Amusement Rides and Devices (approved December 15, 1993; published February 1994):
- **4**. ASTM F846-92 Standard Guide for Testing Performance of Amusement Rides and Devices (approved May 15, 1992);
- **5**. ASTM F853-93 Standard Practice for Maintenance Procedures for Amusement Rides and Devices (approved January 15, 1993; published March 1993);
- **6.** ASTM F893-87 Standard Guide for Inspection of Amusement Rides and Devices (approved May 29, 1987, reapproved 1995; published July 1987);
- **7**. ASTM F1159-94 Standard Practice for the Design and Manufacture of Amusement Rides and Devices (approved April 15, 1994; published June 1994);
- **8**. ASTM F1193-95 Standard Practice for An Amusement Ride and Device Manufacturer Quality Assurance Program (approved January 15, 1995; published March 1995);
- **9.** ASTM F1305-94 Standard Guide for the Classification of Amusement Ride and Device Related Injuries and Illnesses (approved April 15, 1994; published June 1994);
- 10. NFPA 101, Edition 1997, Life Safety Code; and
- 11. NFPA 70, Edition 1996, National Electrical Code.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49: 953.B.

HISTORICAL NOTE: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal. LR 25:86 (January 1999).

§2505. Inspections

- **A.** Where only individual unites of a ride, such as cars, seats, or other carriers are defective and not in compliance with R.S. 40:1484.1 et seq. and/or these rules, such units shall be taken out of service and clearly marked with a red tag reading *Out of Service*; provided, however, such defects do no jeopardize the safety of the entire ride.
- **B**. The assistant secretary or his designee, upon presenting credentials to the ride owner/operator, is authorized without prior notice to inspect and investigate at reasonable times, and within reasonable limits and manner, any area where amusement rides or amusement attractions are assembled or are in use.
- **1.** Inspections shall include, but are not limited to, a review of necessary documents, observation of and/or examination of the ride assembly or set up.
- **2.** Inspection of the ride shall include, as a minimum, foundation, blocking, fuel containers, mechanical and electrical condition and safe operation of the ride.
- **3.** Amusement rides/attractions shall be operated in accordance with the manufacturer recommended restrictions and limitations, such as, but not limited to height, weight, age or passenger placement. In the event the manufacturer has not provided such recommended restrictions, such restrictions and limitations must be established be the operator and shall be submitted to the assistant secretary for approval.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:87 (January 1999).

§2507. Prohibited Use

- **A.** The assistant secretary shall order in writing, a cessation of operation of an amusement ride or attraction, if it has been determined after inspection to be hazardous or unsafe. Operation shall not be resumed until such conditions are corrected to the satisfaction of the assistant secretary.
- **B**. No person shall use or permit to be used, an amusement ride or attraction which is not properly assembled or which is defective or unsafe in any of its parts, components, control, or safety equipment.
- **C.** During a lighting storm, a period of tornado alert or warning, or fire, or when violence, riot or other civil disturbance occurs or threatens an amusement ride or attraction, or in an area adjacent thereto, passengers shall be unloaded or evacuated from the ride and the ride shall be shut down and secured immediately. Operation shall not resume until the situation has returned to a normal, safe operating condition.
- **D**. An amusement ride or attraction which is exposed to wind or storm with lighting or wind gust above that recommended by the manufacturer, shall not be operated except to release or discharge occupants.

E. If the inspector finds that an amusement ride or attraction presents an imminent danger, to life, injury, mechanical/electrical failure, he will attach to such ride a Cessation Order tag and the amusement ride or attraction shall not be used until the ride is made safe to the satisfaction of the assistant secretary and the tag has been removed by the assistant secretary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:87 (January 1999).

§2509. Medical and First Aid

A. The operator shall ensure the availability of medical aid. In the absence of an infirmary, clinic, or hospital used for the treatment of an injured person, within a ten mile radius of the amusement rides and attractions, the operator shall ensure that a person or persons shall be trained to render first aid. First aid supplies recommended by the American Red Cross'

Anatomy of a First Aid Kit obtainable from the Office of the State Fire Marshal or the local Red Cross office, shall be readily available.

- 1. The operator shall have conspicuously posted at the park, carnival, fair or festival office, the telephone numbers and locations for physician, hospital, ambulance service and local fire department to be called in the event of an emergency.
- **2**. The operator shall within twenty four (24) hour of knowledge of the event, report to the assistant secretary any amusement ride or attraction incident which results in serious injury.
- **3.** This report shall describe the nature of the incident, name and address of the affected individual, and a description of the injury, as well as the name and location of the facility where the individual was treated.
- **4**. An incident associated with an amusement ride or attraction which immediately result in a fatal injury shall be reported to the assistant secretary in person or by phone within twelve (12) hours.
- **5**. After determination and consultation with the operator, the assistant secretary may require the scene of such incident to be secured and not disturbed to any greater extent than necessary for the removal of the deceased or injured person or persons. If the ride is removed from service by the assistant secretary an immediate investigation shall be completed and the ride shall not be released for repair and operation until after a complete investigation has been made by the assistant secretary.

§2511. Inspection Fee and Permit

- **A**. A copy of the Certificate of Inspection issued by the assistant secretary shall be continuously displayed on the ride when the ride is in use. The permit shall be encased in such manner as to be protected from weather conditions. Duplicates of such permits shall be issued by the assistant secretary for a fee of \$ 7.50 per each permit.
- **B.** The operator of an amusement ride or attraction shall notify the assistant secretary when ownership is transferred to another. In such case, the new operator shall obtain a new permit.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:88 (January 1999)

§2512. Operation of Amusement rides or Attractions

- **A**. The ride operator shall be at least 16 years of age.
- **B.** The operator of an amusement ride or attractions, exclusive of water amusement rides and karts, shall operate the amusement ride or attraction in compliance with the standards adopted in Section 2503.B of these rules, or the equivalence thereof as submitted to and approved by the assistant secretary.
- **C.** The operator shall refuse a passenger seeking admission to an amusement ride or attraction if the passenger cannot meet a guardian or height restriction if the ride is subject to such a restriction. Legible signs to this effect shall be posted in full view of the public seeking admission to rides.
- **D**. The operator of an amusement ride or attraction shall deny entry to any person, if in the opinion of the operator the entry may cause above normal exposure to risk of discomfort or injury to the person who desires to enter, or if in the opinion of the operator the entry may jeopardize the safety of other patrons or employees.
- **E**. A suitable number of non-combustible trash collection containers shall be provided in and around amusement rides. Excessive accumulations of trash or refuse shall be promptly removed.
- **F**. All parts of amusement ride and temporary structures used by passengers or customers shall be maintained in a clean condition.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire marshal, LR 25:88 (January 1999).

§2513. Maintenance and Inspection Records

A. The operator shall retain, for a period of twelve (12) calendar months, maintenance and inspection records for each amusement ride in accordance with the following ASTM Standards listed in Section 2503.B, F770-93, F853-93, F893-87.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:88 (January 1999).

§2515. Rebuilt and Modified Amusement Rides/Attractions

A. If an amusement ride is materially rebuilt or modified, the operator shall notify the assistant secretary and submit for approval documentation equivalent to that required in ASTM Standard F1159-94 Standard Practice for the Design and Manufacture of Amusement Rides and Devices (approved April 15, 1994; published June 1994) on work that was done.

B. The ride shall be reidentified, by the operator, by a different name of identification number or both.

C. The ride shall be subject to all other provisions of all applicable rules, regulations and statutes as if it were a new ride not previously used.

AUTHORITY NOTE: Promulgated I accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:88 (January 1999).

§2517. Assembly and Disassembly

The operator of an amusement ride shall comply with the construction manual, or the equivalency thereof as determined by the assistant secretary, for the assembly and disassembly fo the ride. The construction manual, or the equivalency thereof as determined by the assistant secretary, shall be kept with the amusement ride attraction and shall be available for use by the assistant secretary. **AUTHORITY NOTE**: Promulgated in accordance with R.S. 40"1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:88 (January 1999).

§2519. Brakes and Stops

- **A.** On an amusement ride or amusement attraction where coasting renders the operation dangerous, either during the period while the ride or attraction is being loaded or unloaded or in the case of power failure or other unforeseeable situation a method of braking shall be provided.
- **B.** If cars or other components of an amusement ride or amusement attraction may collide in such a way as to cause injuries upon failure of normal controls, emergency brakes sufficient to prevent these collisions shall be provided in accordance with the manufacturer's design, or the equivalency thereof as determined by the assistant secretary.

C On amusement rides or amusement attractions which make use of inclined tracks, automatic anti-rollback devices shall be installed to prevent backward movement of the passenger carrying unites in case of failure of the propelling mechanism.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:89 (January 1999).

§2521. Internal Combustion Engines

- **A**. Internal combustion engines for amusement rides or attractions shall be capable of handling the assigned load.
- **B**. Where fuel tanks of internal combustion engines for amusement rides are not of adequate capacity to permit uninterrupted operation during normal operating hour, the amusement ride shall be closed down and unloaded ro evacuated during the refueling procedure. The fuel supply shall not be replenished while the engine is running./
- C. Where an internal combustion engine for an amusement ride or attraction is operated in an enclosed area, the exhaust fumes shall be discharge to outside the enclosed area, as required by NFPA 70, National Electrical Code, 1996 Edition.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Correction, Office of the State Fire Marshal, LR 25:89 (January 1999).

§2523. Wire Rope

- **A**. Wire rope on amusement rides or attractions shall be throughly examined weekly. Wire rope found to be damaged shall be replaced with new rope of proper design and capacity as per the manufacturer's data tag or as approved by the assistant secretary. Any of the following conditions shall be cause for rope replacement:
- **1.** In running ropes, six randomly distributed broken wires in one rope lay or three broken wires in one strand of one rope lay;
- 2. In pendants or standing ropes, evidence of more than one broken wire in one rope lay;
- **3.** Abrasion, scrubbing or peening causing loss of more than 1/3 of the original diameter of the outside diameter of the outside individual wires;
- **4.** Corrosion:
- 5. Kinking, crushing, birdcaging, or other damage resulting in distortion of the rope structure;
- 6. Heat damage;
- 7. Reduction form normal diameter of more than 3/64 inch for diameters up to and including 3/4 inch, 1/16 inch for diameters 7/8 inch to 1 1/8 inches, 3/32 inch for diameters 1 1/4 inch to 1 1/2 inches:
- **8.** Birdcaging or other distortion resulting in some members of the rope structure carrying more load than others; or
- **9.** Noticeable rusting or development of broken wires in the vicinity of attachments. When this condition is localized in an operational rope, it may be eliminated by making a new attachment.
- **B**. Wire rope used to support, suspend, bear or control forces and weights involved in the movement and utilization of tubs, cars, chairs, seats, gondolas, other carriers, the sweeps, or other supporting members of an amusement ride or attraction shall not be lengthened or repaired by splicing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 An 49:953.B. **HISTORICAL NOTE:** Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:89 (January 1999).

§2525. Hydraulic Systems

- **A.** Hydraulic systems and other related equipment used in connection with amusement rides or attractions shall be free of leaks and maintained to ensure safe operation at all times.
- **B**. An amusement ride or attraction which depends upon hydraulic pressure to maintain safe operation shall be provided with a positive means of preventing loss in hydraulic pressure that could result in injury to passengers.
- **C.** Hydraulic lines shall be guarded so that sudden leaks or breakage will not endanger the passengers or the public.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:89 (January 1999).

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AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953 B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:89 (January 1999).

§2527. Pressure Vessels, i.e., Vacuum Tanks

- **A**. Air compressor tanks, storage tanks and appurtenances used in connection with amusement ride or attractions shall be designed and constructed in accordance with Section VIII of the ASME Code Edition and Addendum mandatory at time of construction; and shall also be equipped and maintained to ensure safe operation.
- **B.** Air compressor tanks and other receivers used in connection with air compressor shall comply with the rules of the National Board Inspection Code, 1995 Edition. 1996 Addendum, and the 1997 Addendum.
- C. Air compressor tanks and other air receivers used in connection with air compressors shall be inspected operationally at least once a year and internally when considered necessary by a National Board Commissioned inspector, registered with the State of Louisiana to conduct these inspections and a record of each inspection shall be kept.

D. Air compressor tanks and other air receivers used in connection with air compressors shall have the maximum allowable working pressure conspicuously marked thereon.
AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B.
HISTORICAL NOTE: promulgated by the Department of Public Safety and Corrections, Office

of the State Fire Marshal, L.R. 25:89 (January 1999).

§2529. Protection Against Moving Parts

- **A**. The interior and exterior parts of all amusement rides or attractions with which a passenger may come in contact shall be smooth and rounded, free from sharp, rough or splintered edges and corners, with no protruding studs, bolts, screws, or other projections which might cause injury.
- **B**. Interior parts of passenger carrying apparatus upon which a passenger may be forcibly thrown by the action of the ride or attraction shall be adequately padded.
- **C**. Amusement rides or attraction which are self powered and which are operated by a passenger shall have the driving mechanism guarded and the guard secured in place as to prevent passengers from gaining access to the driving mechanism.
- **D**. Handholds, bars, footrest and other equipment as may be necessary for safe entrance and exit to and from amusement rides or attraction shall be provided and maintained in a safe condition. Such equipment shall be of sufficient strength to support the passengers.
- **E**. Restraining, containing or cushioning devices or a combination of these shall comply with this subsection and be provided and used on all amusement rides where:
- 1. Centrifugal and other forces mechanical malfunction could unseat or dislodge a passenger; or
- **2**. Inadvertent movement of a passenger could cause injury to the passenger or any other passenger; or
- **3**. The speed of the ride presents a hazard to a passenger.
- **F**. Restraining, containing or cushioning devices shall be designed, constructed, installed and maintained so as to provide safe support for passengers.
- **G**. Anchorage for the restraining, containing or cushioning devices shall have a strength at least equal to the strength of such devices.
- **H.** All passengers restraints, cushioning or containing devices shall be provided and maintained in accordance with the manufacturers designs and recommendations and shall not be modified without the approval of the manufacturer and the assistant secretary.
- I. All exposed mechanical parts shall have guards installed to prevent possible personal contact while in operation. Any safeguarding means shall not be used that would cause injury.
 AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B.
 HISTORICAL NOTE: Promulgated the Department of Public Safety and Corrections, Office of

§2531. Electrical Equipment

- **A**. The National Electrical Code, NFPA Number 70, 1996, is hereby adopted as the standard for application in the enforcement of the provisions of R.S. 40:1484.1, et seq. This document may be purchased from the National Fire Protection Association. Batterymarch Park, Quincy, MA 02269.
- **B.** All electrical wiring and equipment used for amusement rides or attractions or for lighting shall be installed and maintained in accordance with the National Electrical Code, NFPA Number 70, 1996.
- **1.** The outlets of electrical power lines carrying more than 120 volts shall be clearly marked to show their voltage.
- **2.** All electrical transformer substations shall be property enclosed and proper warning signs shall be posted.
- **3.** Electrical wiring and equipment located outdoors shall be of such quality and construction or protection that exposure to weather will not interfere with its normal operation.
- **4.** Elevated power lines crossing access or other roads within the proximity of an amusement ride or attraction shall be so suspended as to provide a vertical clearance of at least fifteen feet from the road surface or three feet above any vehicle used within the grounds of a carnival or amusement park, whichever is greater. A horizontal clearance of at least three feet shall be provided on each side of the normal passage space of vehicles.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953. B. **HISTORICAL NOTE:** Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:90 (January 1999).

§2533. Temporary Wiring

- **A.** If temporary wiring is used it shall be in compliance with the applicable section of the National Electrical Code, NFPA Number 70, 1996.
- **B**. Temporary electrical power and lighting installations shall be permitted during the period of construction and remodeling of buildings, structures, equipment or similar actitivies.
- **C.** Temporary electrical power and lighting installations shall be permitted for a period not to exceed 90 days.
- **D**. All lamps for general illumination shall be protected from accidental contact or breakage. Protection shall be provided by elevation of at least 7 feet from normal working surface or by a suitable fixture or lampholder with a guard.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:90 (January 1999).

§2535. Grounding

All grounding shall comply with Article 525 of the National Electrical Code, NFPA Number 70, 1996.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2537. Construction

A. All amusement rides or attractions shall meet the requirements of the ASTM Standard for the Design and Manufacture of Amusement Rides (F1159-94) and the NFPA Life Safety Code 101, 1997 Edition.

- **B.** Water ride data plates shall contain a location number of the ride or flume and the maximum dispatch time interval.
- C. The ride operator shall maintain all of the information as required by the following ASTM Standards: F698-94 Standard Specification for Physical Information to be Provided for Amusement Rides and Devices (July 1994), F770-93 Standard Practice for Operation Procedures for Amusement Rides and Devices (December 1993) and F853-93 Standard Practice for Maintenance Procedures for Amusement Rides and Devices (January 1993) and make it available to the assistant secretary, upon request. If this information is not available it shall be developed by the owner / operator and submitted to the assistant secretary for approval.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2539. Means of Access and Egress

A. Safe and adequate means of access and egress from amusement rides or attractions shall be provided as required by NFPA Life Safety Code 101, 1997 Edition and the ASTM Standard F1159-94 Standard Practice for the Design and Manufacture of Amusement Rides and Devices (April 1994).

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2541. Walkways and Ramps

A. Walkways and ramps shall be erected with a slope not greater than one in ten except that when nonslip surfaces are provided, the grade may be increased to a maximum of one in eight. **AUTHORITY NOTE:** Promulgated in accordance with R.S. 40:1484.3 and 49:953.B.

HISTORICAL NOTE: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2543. Fire Prevention

- **A.** All buildings over one story in height shall be constructed or protected in accordance with NFPA 101-Chapter 8, 1997 Edition.
- **B.** All buildings located within 20 feet of lot lines or within 20 feet of other buildings on the same lot, shall be of protected noncombustible or protected masonry enclosed construction or better.
- **C.** Fabrics constituting part of an amusement ride or attraction shall be flame resistant to meet the provisions of NFPA 101, CHAPTER 8, 1997 Edition.
- **E**. Approved fire extinguishers in accordance with NFPA 10, 1994 Edition shall be provided at the following locations to secure reasonable and adequate protection from fire hazards:
- 1. At or near all operating gasoline or diesel engines;
- 2. At or near all amusement ride or attraction stands, excluding water flumes; and
- 3. At each food handling booth where cooking is done.
- **F**. Flammable waste such as oily rags and other flammable materials shall be placed in covered metal containers which shall be kept in easily accessible locations. Such containers shall not be kept at or near exists.
- **G.** Gasoline and other flammable liquids and flammable gases when stored shall be kept in reasonably cool and ventilated places. Such liquids shall be in containers as prescribed by NFPA 30, 1996, Chapter 4. Smoking and the carrying of lighted cigars, cigarettes, or pipes in prohibited within 50 feet of any area where such liquids or gases are stored, or are transferred from one container to another. Signage shall be posted stating *No Smoking*.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated the Department the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2545. Water Flumes, Structural Design

- **A**. Structural Design. The flumes' structural design and materials shall be in accordance with ASTM Standard F1159-94 Practice for the Design and Manufacture of Amusement Rides and Devices (April, 1994). The flumes and pools shall be watertight and their surfaces shall be smooth and easy to clean.
- **B**. All stairways used as part of a slide shall be constructed to meet the requirements of NFPA 101, 1997 Edition.
- **E.** Visitor and Spectator Areas: The space used by visitors and spectators shall be distinctly and absolutely separated from those spaces used by sliders. Visitors and spectators in street clothes

may be allowed within the perimeter enclosure if they are confined to an area separated from the space the sliders use.

- **F.** Typical Posted User Safety Warnings for Slide Operational Use:
- 1. No running, standing, kneeling, rotating, tumbling, or stopping in flumes or tunnels;
- 2. No diving from flume at any time;
- 3. Never use this slide when under the influence of alcohol or drugs;
- **4**. Only one person at a time. Obey instructions of top pool supervisor and lifeguard at all times;
- **5.** Never form chains unless authorized by slide manager or by posted instructions;
- **6**. Keep hands inside the flume:
- 7. Leave the landing pool promptly after exiting from slide; and
- **8.** Keep all glasses, bottles and food away from pools.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B.

HISTORICAL NOTE: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:91 (January 1999).

§2547. Pumps

- **A**. Pumps and motors shall be provided to circulate the water in the splash pool and slide.
- **B.** Pump units shall be accessible for inspection and service in accordance with NFPA 70.1996 Edition.
- C. All motors shall have thermal overload protection in accordance with NFPA 70, 1996 Edition.
- **D.** The motor frame shall be properly grounded, in accordance with the NFPA 70, 1996 Edition. **AUTHORITY NOTE:** Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State fire Marshal, LR 25:92 (January 1999).

§2549. Water Quality

A. Water quality shall be maintained to meet the requirements of the Louisiana Department of Health and Hospitals and the requirements of ASTM Standard F853-93 Standard Practice for Maintenance Procedures for Amusement rides and Devices (January 1993).

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:92 (January 1999).

§2551. Electrical Safety and Lighting

A. The National Electrical Code. 1996 Edition, as published by the National Fire Protection Association, shall be used for the wiring and grounding of all electrical equipment associated with a flume and for the grounding of all metallic appurtenances.

B. Whenever flumes are operated after dark, artificial lighting shall be provided in upper and lower pool and deck areas, walkways, stairways, and flumes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:92 (January 1999).

§2553. Operation Water Flumes

- **A.** The manufacturer or the general contractor of the flume shall provide the operator with a detailed written operational manual, or guide, for all phases of operations and normal maintenance of each component of the system as per ASTM Standards F770-93 Standard Practice for Operation Procedures for Amusement rides and Devices (December 1993) and F853-93 Standard Practice for Maintenance Procedures for Amusement Rides and Devices (January 1993)
- **B.** The guide shall be kept in a secure area and made available to each employee or inspector as needed

AUTHORITY NOTE: Promulgated in accordance with R. S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:92 (January 1999).

§2555. Responsibility of Flume Operators

A. Flume operators shall meet the requirements of ASTM Standard F770-93 Standard Practice for Operation Procedures for Amusement Rides and Devices (December, 1993) and F853-93 Standard Practice for Maintenance Procedures for amusement rides and Devices (January, 1993) **AUTHORITY NOTE:** Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE:** Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:92 (January 1999).

§2557. Emergency Procedures

- **A**. A written plan for emergencies shall be carefully devised and kept up-to-date. All employees shall be trained and drilled periodically in the execution of the plan.
- **B.** The emergency plan shall encompass crowd control and safe evacuation, drowning, electrical shock, heat prostration, fractures, poisonings, cuts and burns, neck and back or spinal injuries and exposure to chlorine gas. Each of these situations is addressed in the latest American National Red Cross handbook on first aid, a copy of which shall be on hand at the same location as the emergency plan, the first-aid kit, and the emergency telephone numbers.
- C. Each Water Flume location shall have available the following first-aid supplies:
- 1. First aid kit, a standard 24-unit kit stocked and readily accessible for use;
- 2. A stretcher and blankets;
- 3. A standard plywood backboard or other acceptable splint, made to the specification of the

American National Red Cross, for persons with back and neck injuries; and

- **4**. An area or room shall be set aside for the emergency care of casualties.
- **D.** All water flume locations shall have posted by the phones a list of current emergency numbers, to include the nearest available ambulance service, hospital, rescue squad, police assistant secretaries, and fire department.

AUTHORITY NOTE: Promulgated I accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:92 (January 1999).

§2559. Go-Kart Rules and Regulations

A. Kart Design

- 1. The speed of each kart shall be limited or governed to not exceed the following: the maximum adult track speed shall not exceed 25 mph and kiddie track speed shall not exceed 10 mph. Speeds other than defined will require approval from the assistant secretary.
- 2. Whenever the design of a kart enables the readjustment of the governor speed, the means of adjustment shall not be accessible to the patron of the kart.
- **3.** The seat, backrest, seat belts, and leg area of every kart shall be designed to retain the patron inside the kart in the event of a collision or overturn.
- **4.** Karts shall be fitted with a shoulder harness and/or belt restraint system as required by the kart manufacturer and acceptable to the assistant secretary.
- 5. Karts shall be provided with sufficient guards to prevent anyone from coming in contact with the drive chains, belts, hot mufflers, engines or rotating parts.
- **6**. Karts shall have bumpers, wheels and body parts that are comparable to that installed by the original manufacturer.
- **7.** Kart wheels shall be enclosed, guarded or operated so the wheels of a kart cannot interlock with or ride over the wheels of another kart.
- **8**. The kart steering wheel, hub and all exposed components shall be padded or helmets and face shields worn to minimize the risk of injury to any patron in the event of a collision or overturn.
- **9**. The kart fuel tank shall be designed and mounted to prevent it from damage or leaking in the event of a collision or overturn.
- **10.** Headrests or roll bars or a kart shall extend above the patron's head and be capable of supporting the weight of the kart and patron as required by the manufacturer. In the event the manufacturer fails to recommend or address this area the karts shall be equipped with roll bars acceptable to the assistant secretary.
- 11. Karts shall be provided with impact absorbing bumpers, or energy absorption body parts.
- **12.** Karts shall have sufficient muffler systems installed to prevent any noise levels which will interfere with the track operations, adjacent businesses, residential areas or damage the hearing of employees or patrons.
- 13. The brake and throttle controls on a kart shall be clearly identified. The brake and throttle controls shall be foot operated and return automatically to anon-operational position when released.
- **14.** Karts shall be individually identified either by numbers, alpha characters or other markings acceptable to the assistant secretary.

- **B.** Track Design
- 1. The design of the kart track shall be consistent with the kart manufacturers' recommendations. In the absence of any manufacturers' recommendations, the track design shall comply with the current industry standards acceptable to the assistant secretary.
- **2.** Cones may be used on tracks as a warning device and to notify the patron of upcoming changes in the track conditions and are used for the following specific reasons:
 - a. To notify drivers of impending course changes;
 - **b.** To outline the track and mark key points such as the apex of the turns; and
 - **c.** As a warning device to notify the drivers of the severity of upcoming turns by the location and number of cones prior to the turn;
 - **d**. Cone placement:
 - **I.** on the inside corners; one cone to alert the drive and locate the apex;
 - ii. on the outside corner; two cones to identify minor course changes;
 - **iii.** three cones to identify course changes which requires a slower speed to safely negotiate the turn; and
 - iv. four and five cones to identify areas where both slower speed and applied braking will be necessary to safety complete the course.
 - **d**. Once the proper cone locations have been located for the track, these locations shall be marked with high visibility pain under the proper location of the cone. This will alert racing attendants to the correct location of the cones when they are displaced.
- 3. The track shall have a hard smooth surface.
- **4**. The track shall provide road grip sufficient to enable the kart to be driven safely at maximum speed and shall be free of ruts, holes, bumps, water, oil, dirt, or other debris.
- **5.** Track surface and design not covered by manufacturers' recommendations or in the absence of such recommendations must approved by the assistant secretary.
- **6.** The width of the track must be a minimum of 16 feet and maximum of 25 feet. The turns on a oval track must be a minimum radius of the turns is 15 feet.
- 7. The track shall have signs that indicate one direction of travel and no U-turns permitted. These signs shall be posted at various locations around the track perimeter. Signs, signal lights and other safety equipment shall be maintained in operational condition at all times when open to the public.
- **8.** The track shall have no intersecting course configurations. Pit entrances and exits are allowed.
- **9.** The shoulder shall be level with the track and marked with cones. White or yellow line at least four inches in width shall be used to mark all inside and outside edges of the kart track except where barriers are provided along the inside and outside edges of the kart track.
- 10. Barriers shall be designed to prevent a kart from overturning or running over or under the barrier and designed to bring a kart safely to a full stop or guide the kart safely back onto the track.
 - **a**. Barriers shall be placed:

constructed

- i. Between tracks or sections of tracks within 30 feet of each other and or material that twill not readily ignite;
- **ii**. Between the track and obstructions or hazards located with 30 feet from the track;
- iii. Along all non-access and non-egress edges of the pit area; and

- iv. Between the track and any area accessible to spectators.
- 11. Fencing shall be at least 48 inches in height. The fence and gates shall be designed so a four-inch sphere cannot pass through any opening. Fencing shall be located around every kart track.
- **12**. Pit area for loading and unloading must be separated from the track by a fence or barrier. The pit area must be the same surface as the track and have separate entrance and exit lanes.
- **13.** Electrical installations must comply with the National Electrical Code (NFPA-70, 1997 Edition) and include lighting for night operation, if operations are conducted after dark.
- **14**. Proposals for construction of new kart tracks in the State of Louisiana shall be submitted to the Office of the State Fire Marshal, Mechanical Safety Section and other appropriate agencies before beginning construction. The following information shall accompany any application or proposal and shall include but not be limited to:
 - **a**. One copy of site plans and all accompanying documentation.
 - **b**. A copy of all required local, parish or state permits such as but not limited to business license, electrical, building, or plumbing permits. When all inspections are completed by local, parish or state agencies one copy of the completed inspection report shall be sent to the Louisiana State Fire Marshal's Office, Mechanical Safety Section for enclosure in the facility's permanent file. Any alterations or modifications shall be approved prior to beginning work as required for new construction.

15. Fire Protection

- **a.** Kart tracks shall be equipped with ABC dry chemical fire extinguishers with a minimum of five pounds capacity as provided for in National Fire Protection Association-10. Standard for Portable Fire Extinguishers, 1997 Edition, Chapter 1.
 - **b.** A fire extinguisher shall be readily accessible from all areas of the track and one fire extinguisher shall be kept in the pit and refueling area. The fire extinguisher location shall be prominently marked, easily accessible and approximately 36 inches above the ground.

16. Refueling Area

- a. Karts shall be refueled in a designated location remote from any area accessible to the public. Fuel storage and transfer cans must meet the requirements of NFPA 30, 1997 Edition. Any fuel spillage must be promptly cleaned and prevented from running onto the track or any area accessible to the public. Warning signs must be prominently displayed stating that smoking is prohibited in the refueling area.
 - **b**. All kart motors shall be turned off during refueling.

17. Track Operation

- **a.** Karts may only be operated by patrons within height limits set by the manufacturer. If no height limit is set by the manufacturer, patrons shall be at least 52 inches tall and have a leg length that can reach the brake and throttle controls from the patron's seat in order to drive an adult kart.
- **b.** Only patrons less than 52 inches in height with a leg length sufficient to reach the brake and throttle controls from the patron's seat shall be permitted to operate a kiddie kart.
- **c.** Adult karts and kiddie karts shall not be operated on the same track at the same time.
- **d.** No kart shall be operated during a lightening storm, a period of tornado warning, fire, riot or other civil disturbance in the area of the track or in a adjacent area. If any of these events occur while the track is in operation, patrons shall be unloaded and evacuated from

the ride and the ride shut down until normal, safe operational conditions are established.

- **e.** Kart tracks shall be monitored during operation either directly by attendants, or indirectly by electronic visual and audio means acceptable to the assistant secretary.
- **f.** A kart losing oil or fuel shall immediately be removed from the kart track. All karts must be stopped immediately and the track cleaned prior to restarting.
- **g**. When the kart manufacturer recommends, or they are deemed necessary by the assistant secretary, the use of helmets must be provided for all patrons to use. Helmets, if used, must fit the patron's head correctly. All helmets must be cleaned with disinfectant twice daily.
- **h.** Karts designed for single or multiple riders shall use a shoulder harness and/or belt restraint system as required by the kart manufacturer. When deemed necessary for additional protection of kart patrons the assistant secretary may require the addition and use of a shoulder harness or belt restraint system of all karts.
- **i.** Patron's loose clothing and hair longer than shoulder length must be secured prior to operating any kart. Fully enclosed shoes must be worn by kart patrons at all time during operation of a kart.
- **j.** Patrons are prohibited from smoking during kart operation.
- **k**. Track attendants shall not allow patrons to leave their karts either in the pit or on the track unless assisted by track or pit attendants.
- **1.** The kart track operator shall post a conspicuous warning sign at the entrance to the kart track. The sign shall be at least two feet by two feet in sharply contrasting colors and shall contain the following warning:

Persons with the Following Conditions Are Prohibited from the Ride:

- 1. Heart conditions:
- 2. Back or neck ailments; or
- 3. Pregnancy
- **n.** The kart track operator must have a sign posted at the ticket window or track entrance and in the pit area that conveys, at a minimum, the following rules and regulations.
- **i.** The patron height limit specified by the manufacturer, or no less than 52 inches for adult karts and no more than 52 inches for kiddie karts.
 - ii. Keep both hands on the wheel and both feet in the kart at all times. Don not get out of the kart unless track attendant is present.
 - **iii**. All loose clothing and hair longer than shoulder length must be secured. Fully enclosed shoes must be worn by kart patrons at all times during operation of kart.
 - iv. No smoking in kart or pit area.
 - v. Persons under the influence of intoxicants will no be allowed to operate karts.
 - vi. The use of private karts or vehicles will be prohibited on kart track when they are open to the public.

C. Record Retention and Inspection

1. Daily inspections must be made on all karts prior to operation. Inspections shall include but not be limited to: tires, padding, steering wheel, frame welds, spindles, axles, seat or shoulder belts, roll bars, gasoline tank condition, brake and gas pedal operation, and other parts as recommended by the kart manufacturer or the assistant secretary.

- **2.** Weekly, monthly and annual inspections shall be performed as recommended by the kart manufacturer or the assistant secretary.
- **3.** A track operation manual shall be written in the English language and available for review by the assistant secretary.
- **4.** The kart track shall have and demonstrate an emergency plan for evacuation of patrons and employees in the event of an emergency. This shall include but not be limited to: fires, kart collisions, dangerous weather, obstructions on the track, handling intoxicated patrons and emergency first aid.
- **5.** The kart track shall maintain records of all required inspections.

AUTHORITY NOTE: Promulgated in accordance with R.S. 40:1484.3 and 49:953.B. **HISTORICAL NOTE**: Promulgated by the Department of Public Safety and Corrections, Office of the State Fire Marshal, LR 25:93 (January 1999).